

## Master of Science in Education: Major in 21<sup>st</sup> Century Teaching & Learning

### 2007-2008 Course Descriptions

#### **EDAM 5030: Teaching in the 21st Century**

Must be taken as first course in the program.

This course lays the foundation of the 21st Century Teaching and Learning Series by answering the question, "Why do I need to change my instruction?" This course causes reflection of current instruction in light of what 21st century students need and provides a systems view of what needs to change in the classroom and in the school system. (3 Credits)  
(Summer I, Summer II, Fall I, Fall II, Fall III, Spring I, Spring II, Spring III)

#### **EDAM 5031: Action Research for Educational Change**

Prerequisite: EDAM 5030

Action research is applied research educators can do within the school environment to improve practice, from instruction to learning. Knowledge and skill will be developed in designing action research, using both quantitative and qualitative data collection methods, to inform and improve practice. (3 Credits)  
(Summer II, Fall II, Spring II)

#### **EDAM 5032: Educational Assessment to Guide Instruction**

Prerequisite: EDAM 5030

Using data-driven instruction to guide teaching and learning is critical in the attainment of student learning outcomes. Educators will learn to use assessments to plan, modify, and differentiate instruction, as well as to assess mastery of content and academic standards through the selection of appropriate content and the design of varied assessments to lead to the interpretation and application of data from multiple assessment sources. (3 Credits)  
(Fall III, Spring I, Spring II, Spring III)

#### **EDAM 5033: Developing Reading & Writing across the Curriculum**

Prerequisite: EDAM 5035

The attainment of higher levels of literacy in adolescent learners requires the development of these skills across all curricular areas. This course will enable educators to develop and refine secondary students' skills in reading, writing, speaking, and listening through the design of integrative experiences in content area instruction that are both student-centered and performance-based. (3 Credits)  
(Spring III)

#### **EDAM 5034: Applying Advanced Technology to Support Standards-based Instruction**

Prerequisite: EDAM 5030

This course introduces students to cutting-edge instructional technologies and the ways it can be used to support standards-based instruction. Ubiquitous use of technology will be emphasized to create enriched and motivating authentic learning experiences for students. (3 Credits)  
(available during the summer of the 2008-2009 academic year)

#### **EDAM 5035A/B/C/D: Teaching Authentic Content in: Math or Science or Social Studies or Language Arts**

Prerequisite: EDAM 5030

These courses show teachers of specific subject areas how to provide an authentic experience for their students by using the previously learned methods to transform their teaching into having students engage in learning and activities as people actually would in the real world. (3 Credits)  
(Fall I, Fall II, Fall III, Spring I, Spring II, Spring III)

#### **EDAM 5036A/B/C/D: Differentiated Instruction in the Classroom: Math or Science or Social Studies or Language Arts**

Prerequisite: EDAM 5030

This course will explain how learners can determine the needs and learning styles of their students in order to differentiate instruction so that the needs and learning styles of students are met. (3 Credits)  
(Spring I, Spring II, Spring III)

#### **EDAM 5037A/B/C/D: Inquiry-based Learning in the Classroom: Math or Science or Social Studies or Language Arts**

Prerequisite: EDAM 5035

These courses explain that inquiry-based learning helps students "learn how to learn" through observation, reason, critical thinking, and the ability to justify or question knowledge. These courses also allow learners to understand that inquiry-based learning helps students learn more by asking questions and doing investigations in order to learn, with the teacher acting more as a consultant. (3 Credits)  
(available during the fall of the 2008-2009 academic year)

#### **EDAM 5038A/B/C/D: Project-Based Learning in the Classroom: Math or Science or Social Studies or Language Arts**

Prerequisite: EDAM 5035

These courses explain how project-based learning addresses learning through completing projects that foster skills in communication, collaboration, networking, research, using technology, and critical thinking. (3 Credits)  
(available during the fall of the 2008-2009 academic year)

#### **EDAM 5039: Applying 21st Century Teaching to Educational Practice**

Prerequisite: EDAM 5030; EDAM 5031; EDAM 5032; EDAM 5035; EDAM 5036; EDAM 5033; EDAM 5034; EDAM 5037; EDAM 5038

This capstone course requires secondary educators to transfer the knowledge and skills attained in this program to practice through authentic teaching and learning experiences. Projects that demonstrate the mastery of program goals and objectives will be planned, implemented, and reflected upon in a cumulative experience that enables educators to demonstrate their mastery of 21st century pedagogy. (3 Credits)  
(available during the spring of the 2008-2009 academic year)